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EXAMINER

PHAM, HUNG Q

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/707,017	Applicant(s) ZRUBEK ET AL.	
	Examiner HUNG Q. PHAM	Art Unit 2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Petition for Revival

The applicant filed a Petition for Revival the Application on 04/27/2007. The Petition is GRANTED as indicated in the Petition Decision 07/29/2008.

Response to Arguments

1. Applicant's arguments with respect to the rejection under 35 U.S.C. § 102 filed on 04/27/2007 have been fully considered but they are not persuasive.

- As argued by applicant (Pages 16-17):

There is no teaching in Aslam of determining similarity scores between source and target documents by a similarity search server and associated remote similarity search agents. Since the Office has failed to establish that there is no difference between the Applicants' claimed invention and the reference of Aslam, the Applicants requests withdrawal of the rejections and reconsideration of the patent with respect to the above-referenced claims.

The examiner respectfully disagrees.

As disclosed by Aslam, the Aslam system consists of an augmented version of the Smart system with Smart search engines (Aslam, Page 4, Section 2.3 The System, first paragraph) for a plurality of databases, e.g., Tuolomne Technical Report, Tioga Technical Reports as in the first screenshot of FIG. 3. Aslam further discloses the similarity between two documents is measured by the cosine metric in the vector space model of the Smart information retrieval system (Aslam, Page 2, Col. 2 Lines 18-21). The Aslam teaching as discussed indicates the step of *determining similarity scores between the source and target documents*, e.g., the similarity measured by cosine metrics between two documents, *by a similarity search server and associated remote similarity search agent*, e.g., the Smart system and associated Smart search engines.

- As argued by applicant (Page 17):

Preamble: Turning to the preamble of Applicants' independent claim 1, as amended, and similar independent claims 17 and 29, as amended, which recite, a method or system "for automatically analyzing relationships between target and source documents..." There is no teaching in Aslam of automatically analyzing relationships between target and source documents. The cited passage by the Office of p 2, col.1 line 58 through p. 2 col.2 line 2 of Aslam teaches a post processor that classifies data into clusters that capture topic categories and subcategories, and an on-line algorithm for constructing self-organizing information systems, for routing problems, for topic detection, and for topic tracking. There is no relevance between this citation from Aslam and the preamble of Applicants' claims 1, 17 and 29, and there is no relationship of these cited post processor and on-line algorithm functions to any functions in Applicants' disclosure. There is no teaching in this citation of the preamble of Applicants' claims 1, 17 and 29.

The examiner respectfully disagrees.

In response to applicant's arguments, the recitation *"for automatically analyzing relationships between target and source documents..."* has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

- As argued by applicant (Page 18):

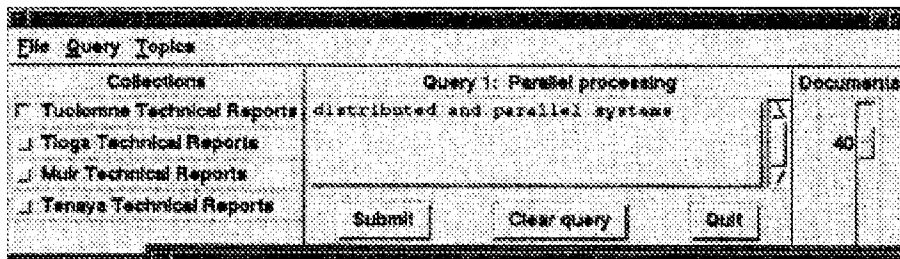
First Claim Limitation: Turning to the first limitation of Applicants' independent claim 1, as amended, and similar independent claims 17 and 29, as amended, which recite, "receiving an autolink command by a link analysis server from an application program". There is no teaching in Aslam of receiving an autolink command by a link analysis server. The cited passage by the Office of p 4, col. 2 line 7 through p. 5 col.1 line 3 of Aslam teaches using a "Smart" search engine to compute a document to

Art Unit: 2168

document similarity matrix for a set of retrieved documents, the similarity matrix being used to compute clusters and to visualize clusters. There is no relevance between this Aslam citation and Applicants' claims 1, 17 and 29, and there is no relationship of the cited "Smart" search engine, similarity matrix, or computing and visualizing clusters to any functions in Applicants' disclosure. There is no teaching in this Office citation of the first limitation of Applicants' claims 1, 17 and 29. Therefore, there is no anticipation under 35 U.S.C. § 102(b) and Applicants request that the claim rejection be withdrawn.

The examiner respectfully disagrees.

As shown in the first screenshot of FIG. 3:



After entering Query 1, the user click the SUBMIT button, the SUBMIT request is received by the Aslam system as discussed on Page 4, Section 2.3 The System, first paragraph. The SUBMIT command is considered as being equivalent to the claimed *autolink command*. The Aslam system as discussed on Page 4, Section 2.3 The System, first paragraph is being considered as being equivalent to the claimed *a link analysis server*. The Graphical User Interface for entering the query is considered as being equivalent to the claimed *an application program*. In short, the screenshot above indicates the step of *receiving an autolink command by a link analysis server*, e.g., the Aslam system receives the SUBMIT request, *from an application program*, e.g., the Graphical User Interface.

- As argued by applicant (Page 18):

Second Claim Limitation: Turning to the second limitation of Applicants' independent claim 1, as amended, and similar independent claims 17 and 29, as amended, which recite, "accessing a processing profile identified in the autolink command". There is no teaching in Aslam of accessing a processing profile identified in an autolink command. The cited passage by the Office of p 5, col.1 lines 1-3 of Aslam teaches allowing users to input queries by typing free text, while having a choice of specifying several corpora. There is no relevance between this citation and Applicants' claims 1, 17 and 29, and there is no relationship of user input queries, typing free text, or choosing from several corpora to any functions in Applicants' disclosure. There is no teaching in this citation of the second limitation of Applicants' claims 1, 17 and 29.

The examiner respectfully disagrees.

As shown in the screenshot above, the user can input queries by typing free text and he/she has the choice of specifying several corpora. Smart is invoked to produce a ranked list to the top most relevant documents (Page 5, Col. 1 Lines 1-8). The inputted query and specified corpora is considered as being equivalent to the claimed *a processing profile identified in the autolink command*. In order to return the ranked list, the inputted query and specified corpora must be accessed by Smart system.

- As argued by applicant (Page 19):

Third Claim Limitation: Turning to the third limitation of Applicants' independent claim 1, as amended, and similar independent claims 17 and 29, as amended, which recite, "accessing source and target document data identified in the autolink command". There is no teaching in Aslam of accessing source and target document data in an autolink command. The cited passage by the Office of p 5, col.1 lines 2-3 of Aslam teaches users having a choice of specifying several corpora. There is no relevance between this citation and Applicants' claims 1, 17 and 29, and there is no relationship of choosing from several corpora to any functions in Applicants' disclosure. There is no teaching in this citation of the third limitation of Applicants' claims 1, 17 and 29.

The examiner respectfully disagrees.

As discussed above, the user can input queries by typing free text and he/she has the choice of specifying several corpora. Smart is invoked to produce a ranked list to the top most relevant documents, their titles, locations and document-to-document similarity information (Page 5, Col. 1 Lines 1-8). The title, location of document-to-document corresponding to the inputted query and specified corpora is considered as being equivalent to the claimed *source and target document data identified in the autolink command*. In order to return the ranked list, the location of document-to-document corresponding to the inputted query and specified corpora must be accessed by Smart system.

- As argued by applicant (Pages 19-20):

Fifth Claim Limitation: Turning to the fifth limitation of Applicants' independent claim 1, as amended, and similar independent claims 17 and 29, as amended, which recite, "performing a link analysis for identifying the relationships based on comparing the similarity scores between the target and source documents". There is no teaching in Aslam of performing a link analysis for identifying the relationships based on comparing the similarity scores between the target and source documents. The cited passage by the Office of p 5, col.1 lines 6-9 of Aslam teaches invoking the "Smart" system to produce a ranked list of the most relevant documents, their titles, locations and document to document similarity information. There is no relevance between this citation and Applicants' claims 1, 17 and 29, and there is no teaching in this citation of identifying relationships based on comparing similarity scores.

The examiner respectfully disagrees.

As discussed above, in response to the query, Smart is invoked to produce a ranked list to the top most relevant documents, their titles, locations and document-to-document similarity information. The similarity information is provided as input to the star algorithm (Page 5, Col. 1 Lines 1-13). As disclosed in the section 2.1 The Star Algorithm (Page 2, Col. 2 Lines 13-21), the retrieved information is represented by a similarity graph, where vertices in the graph

Art Unit: 2168

correspond to documents and each weighted edge in the graph corresponds to a measure of similarity between two documents. As further disclosed at section 2.2 Cluster Quality, the edge representing the similarity is analyzed by Theorem 1. The analyzing of similarities to identify the edges between documents using Theorem1 is considered as being equivalent to the claimed *performing a link analysis for identifying the relationships*. The analyzing is based on the ranked list of similarities, wherein *the similarities scores between the target and source documents are compared* for ranking.

- As argued by applicant (Page 20):

Sixth Claim Limitation: Turning to the sixth limitation of Applicants' independent claim 1, as amended, and similar independent claims 17 and 29, as amended, which recite, "sending a response containing a link analysis result identifying the relationships to the application program". There is no teaching in Aslam of sending a link analysis result for identifying relationships to an application program. The cited passage by the Office of p 5, col.1 lines 6-9 of Aslam teaches invoking the "Smart" system to produce a ranked list of the most relevant documents, their titles, locations and document to document similarity information. There is no relevance between this citation and Applicants' claims 1, 17 and 29, and there is no teaching in this citation of identifying relationships based on comparing similarity scores. There is no teaching in this citation of the sixth limitation of Applicants' claims 1, 17 and 29.

The examiner respectfully disagrees.

As shown in the bottom screenshot of FIG. 3, *a response containing a link analysis result identifying the relationships* is sent to the Graphical User Interface. The Graphical User Interface is considered as being equivalent to the claimed *the application program* as discussed above.

2. Applicant's arguments on pages 21-25 with respect to the rejection under 35 U.S.C. § 102 and 103 filed 04/27/2007 have been fully considered but they are not persuasive.

Art Unit: 2168

Since the Office has established a prima facie case of anticipation for independent claims 1, 17 and 29. Since the rejection of claims 1, 17 and 29 are supported by the Aslam references. The rejections of these dependent claims as being anticipated or obvious are also supported by the Aslam, Apte and Lam references as detailed in the previous Office Action.

Double Patenting

Applicant is advised that should claim 29 be found allowable, claim 1 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the clause *the relationships* at line 9 references to other items in the claimed. It is unclear what item is being referenced.

Art Unit: 2168

Claim 17 is similar to claim 1. Claim 17 is rejected for at least the same reason as discussed with respect to claim 1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5, 7-14, 16-19 and 21-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Aslam et al. [Static and Dynamic Information Organization with Star Clusters].

Regarding claim claims 1 and 17, Aslam et al. teaches a software method in a computer system for automatically analyzing relationships between target and source documents (Page 2 Col. 1 Line 58 through Page 2 Col. 2 Line 2), comprising the steps of:

receiving an autolink command by a link analysis server from an application program (As shown in the first screenshot of FIG. 3, after entering Query 1, the user click the SUBMIT button, the SUBMIT request is received by the Aslam system as discussed on Page 4, Section 2.3 The System, first paragraph. The SUBMIT command is considered as being equivalent to the claimed *autolink command*. The Aslam system as discussed on Page 4, Section 2.3 The System, first paragraph is being considered as being equivalent to the claimed *a link analysis server*. The Graphical User Interface for entering the query is considered as being equivalent to the claimed *an application program*. In short, the screenshot above indicates the step of *receiving an autolink*

Art Unit: 2168

command by a link analysis server, e.g., the Aslam system receives the SUBMIT request, *from an application program*, e.g., the Graphical User Interface);

accessing a processing profile identified in the autolink command (As shown in the first screenshot of FIG. 3, the user can input queries by typing free text and he/she has the choice of specifying several corpora. Smart is invoked to produce a ranked list to the top most relevant documents (Page 5, Col. 1 Lines 1-8). The inputted query and specified corpora is considered as being equivalent to the claimed *a processing profile identified in the autolink command*. In order to return the ranked list, the inputted query and specified corpora must be accessed by Smart system);

accessing source and target document data identified in the autolink command (The user can input queries by typing free text and he/she has the choice of specifying several corpora. Smart is invoked to produce a ranked list to the top most relevant documents, their titles, locations and document-to-document similarity information (Page 5, Col. 1 Lines 1-8). The title, location of document-to-document corresponding to the inputted query and specified corpora is considered as being equivalent to the claimed *source and target document data identified in the autolink command*. In order to return the ranked list, the location of document-to-document corresponding to the inputted query and specified corpora must be accessed by Smart system);

determining similarity scores between the source and target documents by a similarity search server and associated remote similarity search agents (As disclosed by Aslam, the Aslam system consists of an augmented version of the Smart system with Smart search engines (Aslam, Page 4, Section 2.3 The System, first paragraph) for a plurality of databases, e.g., Tuolomne Technical Report, Tioga Technical Reports as in the first screenshot of FIG. 3. Aslam further discloses the similarity between two documents is measured by the cosine metric in the vector space model of the Smart information retrieval system (Aslam, Page 2, Col. 2 Lines 18-21). The Aslam

Art Unit: 2168

teaching as discussed indicates the step of *determining similarity scores between the source and target documents*, e.g., the similarity measured by cosine metrics between two documents, *by a similarity search server and associated remote similarity search agent*, e.g., the Smart system and associated Smart search engines);

performing a link analysis for identifying the relationships based on comparing similarity scores between target and source documents (In response to the query, Smart is invoked to produce a ranked list to the top most relevant documents, their titles, locations and document-to-document similarity information. The similarity information is provided as input to the star algorithm (Page 5, Col. 1 Lines 1-13). As disclosed in the section 2.1 The Star Algorithm (Page 2, Col. 2 Lines 13-21), the retrieved information is represented by a similarity graph, where vertices in the graph correspond to documents and each weighted edge in the graph corresponds to a measure of similarity between two documents. As further disclosed at section 2.2 Cluster Quality, the edge representing the similarity is analyzed by Theorem 1. The analyzing of similarities to identify the edges between documents using Theorem1 is considered as being equivalent to the claimed *performing a link analysis for identifying the relationships*. The analyzing is based on the ranked list of similarities, wherein *the similarities scores between the target and source documents are compared* for ranking); and

sending a response containing a link analysis result to the application program (As shown in the bottom screenshot of FIG. 3, *a response containing a link analysis result identifying the relationships* is sent to the Graphical User Interface. The Graphical User Interface is considered as being equivalent to the claimed *the application program* as discussed above).

Regarding claims 2 and 18, Aslam et al. teaches the step of *receiving comprises receiving an autolink command by a link analysis server from a user interface program connected to the link analysis server* (Page 4 Figure 3, showing a user interface for sending an autolink command).

Regarding claim claims 3 and 23, Aslam et al teaches the step of accessing a processing profile further comprises: *identifying an options element* (Page 5 Col. 1 Lines 2-3); *identifying a threshold limit element defining a path to threshold limit values* (Page 2 Col. 2 Lines 28-30); *identifying a mapping element for defining mappings between source and target document data* (Page 5 Col. 1 Lines 2-3, specifying corpora containing source and target documents to be analyzed for links); *identifying an output element for defining output attributes including detail level 1, detail level 2, detail level 3, detail level 4, persistence level 1, persistence level 2, persistence level 3, persistence level 4; and identifying a datasource element for defining a persistence data source* (Page 5 Col. 1 Lines 20-22).

Regarding claims 5 and 19, Aslam et al teaches the step of *accessing a processing profile comprises accessing a processing profile embedded online in the autolink command* (Page 5 Col. 1 Lines 1-3, processing profile is read on query, because both provide information regarding how an autolink command is to be processed).

Regarding claim 7, Aslam et al teaches *the source document data comprises an inline designation attribute, one or more source document key attributes, a no-source attribute for indicating target documents are compared to each other, a query attribute, a database attribute, a cache designation attribute, and a block size attribute* (Page 5 Col. 1 Lines 1-3).

Regarding claim 8, Aslam et al teaches the step of *accessing source document data comprises accessing source document data embedded inline with the autolink command* (Page 5 Col. 1 Lines 2-3, source document data is equivalent to information specifying several corpora, because both pieces of information identify source documents).

Regarding claim 9, Aslam et al teaches the step of *accessing source document data comprises accessing source document data from a similarity search server by issuing a query command to the similarity search server from the link analysis server* (Page 4 Col. 2 Line 7 through Page 5 Col. 1 Line 2).

Regarding claim 10, Aslam et al teaches *the target document data comprises an inline designation attribute, one or more source document key attributes, a query attribute, a database attribute, a cache designation attribute, and a block size attribute* (Page 5 Col. 1 Lines 1-3).

Regarding claim 11, Aslam et al teaches the step of *accessing target document data comprises accessing target document data embedded inline in the autolink command* (Page 5 Col. 1 Lines 2-3, target document data is equivalent to information specifying several corpora, because both pieces of information identify target documents).

Regarding claim 12, Aslam et al teaches the step of *accessing target document data comprises accessing target document data from a similarity search server by issuing a query command to the similarity search server from the link analysis server* (Page 4 Col. 2 Line 7 through Page 5 Col. 1 Line 2).

Regarding claim 13, Aslam et al teaches the step of *performing a link analysis for identifying relationships is based on a comparison selected from the group consisting of: comparing one source document with many target documents* (Page 4 Col. 2 Lines 7- 8, since the system has the capability of running on a specified subcollection, inherently, it has the capability of running on a specified subcollection consisting of a single document); *comparing multiple source documents with multiple target documents in different groups* (Page 4 Col. 2 Line 7 through Page 5 Col. 1 Line 2, run on specific subcollection); and *comparing multiple documents within a group with each other* (Page 4 Col. 2 line 7 through Page 5 Col. 1 line 2, run on whole collection).

Regarding claim 14, Aslam et al teaches the step of *sending a response is selected from the group consisting of* (the use of the wording "a response is selected from the group consisting of" necessitates that only one of the options be taught by the prior art for rejection of this claim): *sending a response containing an error message; sending a response containing a count of link matches; sending a response containing a count of link matches and source documents; sending a response containing a count of link matches, source documents, and document scores that were used in a link match result* (Page 5 Col. 1 Lines 6-9, the most relevant documents and document-to-document similarity information is provided. A count of the documents is inherent in the list of most relevant documents, since the number of documents belonging to this list is the count. Document score is read on document-to-document similarity information; Page 3 Col. 1 Lines 43-45 indicates a score between documents. Source documents are contained in the document-to-document similarity information, since this information shows the similarity between documents, including any documents that happen to be in the set of source documents.); and *sending a response containing a count of link matches, source documents, document scores and document attribute scores that were used in a link match result* (FIG. 3).

Regarding claim 16, Aslam et al teaches *a computer readable medium containing instructions for controlling a computer system according to the software method of claim 1* (Page 4 Col. 1 Lines 2-4, the method is implemented as a computer system, which inherently includes a computer- readable medium containing instructions for controlling a computer system).

Regarding claim 21, Aslam et al teaches *the source document is accessed from a similarity search server* (Page 4 Col. 1 Lines 7-8, search server is read on search engine).

Art Unit: 2168

Regarding claim 22, Aslam et al teaches *the target data is accessed from a similarity search server* (Page 4 Col. 1 Lines 7-8, search server is read on search engine).

Regarding claim 24, Aslam et al teaches the means for *receiving an autolink command comprises an input processing section of the link analysis server* (Page 5 Col. 1 Lines 1-6, an input processing section is inherent, since the system has the capability to receive and process input).

Regarding claim 25, Aslam et al teaches the means for *accessing the processing profile, the source document data and the target document data comprises a data manager section of the link analysis server* (Page 5 Col. 1 Lines 1-6, a data manager section is inherent, since the system has the capability to access a processing profile).

Regarding claim 26, Aslam et al teaches the means for *performing a link analysis comprises an engine manager section containing an engine core within the link analysis section* (Page 5 Col. 1 Lines 6-13, an engine manager section containing an engine core within the link analysis section is inherent, since the system has the capability to perform link analysis).

Regarding claim 27, Aslam et al teaches the means for *sending a response is an output section of the link analysis server* (Page 5 Col. 1 Lines 6-9, an output section is inherent, since the system has the capability to output the results of link analysis).

Regarding claim 28, Aslam et al teaches *a data persistence section of the link analysis server for storing response results* (Page 5 Col. 1 Lines 6-9, a data persistence section is inherent, since the system has the capability to store the results of link analysis).

Regarding claim 29, Aslam et al teaches a software method in a computer system for automatically analyzing relationships between target and source documents (Page 2 Col. 1 line 58 through Page 2 Col. 2 line 2), comprising the steps of:

receiving an autolink command by a link analysis server from a requesting application designating a processing profile, target documents and source documents (Page 4 Col. 2 line 7 through Page 5 Col. 1 line 3);

accessing the processing profile from a database (Page 5 Col. 1 Lines 1-3, processing profile is read on query, because both provide information regarding how an autolink command is to be processed);

accessing similarity scores between attributes of the target documents and attributes of the source documents from a similarity search server (Page 5 Col. 1 Lines 1-3, processing profile is read on query, because both provide information regarding how an autolink command is to be processed);

linking target document attributes and source document attributes within the link analysis server based on comparative values of attribute similarity scores (Page 5 Col. 1 Lines 6-9);

sending results of the linking step to the requesting application (Page 5 Col. 1 Lines 6-9); and

saving the results in a persistence database (Page 5 Col. 1 Lines 6-11, inherently, the results must be stored as an intermediate step before the results are provided as input).

Regarding claim 30, Aslam et al teaches *the processing profile is embedded inline in the autolink command* (Page 4 Col. 2 Line 7 through Page 5 Col. 1 Line 3, issuing a query is equivalent to an

Art Unit: 2168

autolink command, since both initiate link analysis. A query is equivalent to a processing profile, since it determines which data are to be processed, and how that data will be processed).

Regarding claim 31, Aslam et al teaches *the target document attributes and associated schema are embedded inline in the autolink command* (Page 5 Col. 1 Lines 2-3, target document data is equivalent to information specifying several corpora, because both pieces of information identify target documents).

Regarding claim 32, Aslam et al teaches *the source document attributes and associated schema are embedded inline in the autolink command* (Page 5 Col. 1 Lines 2-3, source document data is equivalent to information specifying several corpora, because both pieces of information identify source documents).

Regarding claims 33 and 35, Aslam et al teaches the steps of *locating the target documents and the remote similarity search agents in one or more remote disparate databases; determining similarity search scores between the source documents and the target documents by the remote similarity search agents using measurement and comparison functions; and transmitting the similarity search scores from the one or more remote disparate databases to the similarity search server* (Page 5, Col. 1 Lines 1-13).

Regarding claims 34 and 36, Aslam et al teaches the step of *locating the source documents in the one or more remote disparate databases* (Page 5, Col. 1 Lines 1-13).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aslam et al. [Static and Dynamic Information Organization with Star Clusters] in view of Apte et al [USP 6,654,739 B1].

Regarding claim 4, Aslam et al does not explicitly teach *specifying a stop-on count attribute; specifying an analysis-type attribute, including single, multiple, and group values; specifying a count-type attribute, including match-count, statistical, and threshold; specifying a minimum and maximum number of document links to be found; specifying threshold limits for defining ranges of similarity scores for indicating linked relationships, including attributes greater-than, greater-than-and-equal-to, less-than, less-than-and-equal-to, equal-to, and not-equal-to; and specifying scoring aggregation options, including attributes include-minimum, include-maximum, and average-top-N-scores.*

Art Unit: 2168

Apte et al teaches *specifying a stop-on count attribute* (Col. 4 Lines 26-27);
specifying an analysis-type attribute, including single, multiple, and group values (Col. 4 Lines 28-29);
specifying a count-type attribute, including match-count, statistical, and threshold (Col. 5 Lines 59-60);
specifying a minimum and maximum number of document links to be found (Col. 4 Lines 26-27, where the single value k acts as both a minimum and maximum, since exactly k matching documents are computed);
specifying threshold limits for defining ranges of similarity scores for indicating linked relationships, including attributes greater-than, greater-than-and-equal-to, less-than, less-than-and-equal-to, equal-to, and not-equal-to (Col. 5 Lines 58-60); and
specifying scoring aggregation options, including attributes include-minimum, include-maximum, and average-top-N-scores (Col. 5 Lines 58-60).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have modified the method of analyzing relationships between documents taught by Aslam et al by the method of computing a similarity score taught by Apte et al, because specifying a maximum number of document links to be found enables efficient computation of the links (Apte et al Col. 4 Lines 33-35).

Claims 6, 15, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aslam et al. [Static and Dynamic Information Organization with Star Clusters] in view of Lam et al [U.S. Patent Publication 2003/0220858 A1].

Regarding claim 6 and 20, Aslam et al does not explicitly teach the step of *accessing a processing profile comprises accessing a processing profile from a persistence database*.

Art Unit: 2168

Lam et al teaches the step of *accessing a processing profile comprises accessing a processing profile from a persistence database* (Lines 1-2 of paragraph [0121], accessing a stored link).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have modified the method of analyzing relationships between documents taught by Aslam et al by the step of storing links between similar records taught by Lam et al, because storing links allows the links to be used later (Lam et al, Lines 1-2 of paragraph [0121]).

Regarding claim 15, Aslam et al does not explicitly teach the step of *storing the response containing the link analysis result in a persistence database*.

Lam et al teaches the step of *storing the response containing the link analysis result in a persistence database* (Lines 16-17 of paragraph [0120] and Lines 1-2 of paragraph [0121], item 112 in Figure 1, indicating links produced as a result of a matching process are stored in a database).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have modified the method of analyzing relationships between documents taught by Aslam et al by the step of storing links between similar records taught by Lam et al, because storing links allows the links to be used later (Lam et al, Lines 1-2 of paragraph [0121]).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

Art Unit: 2168

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q. PHAM whose telephone number is 571-272-4040. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIM T. VO can be reached on 571-272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HUNG Q. PHAM/
Primary Examiner
Art Unit 2168

August 04, 2008